

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of

O'CONNOR

Group Art Unit: Unknown

Appln. No.: New Application

Examiner: Unknown

Filed: November 19, 2003

FOR: A METHOD OF APPLYING A FLOOR COVERING FOR BOARDS

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November 19, 2003

**PATENT SEARCH STATEMENT, INFORMATION DISCLOSURE
STATEMENT, AND DISCUSSION OF PATENTS MOST CLOSELY
RELATED TO SUBJECT MATTER OF CLAIMS**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned hereby states that a pre-examination search was made by professional patent search personnel for prior art relevant to the claimed subject matter of the above-identified application. The search was conducted by a retired Examiner from Class 52 in the public search room of the United States Patent and Trademark Office. The areas searched included Class 52, Subclasses 181, 177, 179, 650.3, 746.1, 746.11; Class 428, Subclass 40.1; and, Class 156, Subclass 72. Examiners Knable and Yau were consulted.

The references found as a result of the search efforts are listed on the form PTO-1449 filed herewith. Additional prior art references of which Applicant was aware are also listed.

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The invention is directed to a method of applying a flexible covering to a board for exterior use as recited in claim 1. The covering has a thick, moldable adhesive layer that provides an initial tackiness to assist in installation and mechanically bonds to the underlying board as it ages. The adhesive is covered with a release sheet having a positioning guide strip that assists in “steering” the covering strip down a board during installation by providing an initial tack area. The covering is then secured by removing the remaining release sheet when the covering is in a proper position on the board.

The most material prior art references found in our search include (1) U.S. Patent 4,849,267 to Ward et al. (Ward), (2) U.S. Patent 4,554,194 to Haas et al. (Haas), (3) U.S. Patent 3,937,640 to Tajima et al. (Tajima); and, (4) U.S. Patent 5,613,339 to Pollock. None of these references discloses or suggests the combination of steps of claim 1 as explained below.

WARD

Ward discloses a method of installing a foam backed carpet with adhesive to an underlying floor. Ward provides a carpet that is formed with a fibrous face 12 secured to a primary backing 13 that engages a secondary backing 14 having an embossed pattern 20 with high and low areas 21, 22. A pressure sensitive adhesive 15 is applied to the secondary backing 14 in the amount of 0.5 to 1.5 ounces per square yard “to provide an acceptable level of intended tackiness and cohesiveness needed for releasably securing the floor covering 10 to the underlying floor.” (Col. 5, lines 45-50.) The adhesive is selected to have a low tensile strength to facilitate removal. According to the specification, aging tests that simulate releasable securement of the floor covering 10 over protracted time periods shows that the floor covering can be peeled away without having retention of the adhesive to the underlying floor or rupture of the secondary backing 14. (Col. 4, lines 10-23.)

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A release cover 30 is applied over the adhesive 15 after it has dried and the floor covering is wound into a roll. The release cover 30 includes at least one longitudinal tear line 60 formed from a plurality of perforations, as explained in col. 5, line 64 – col. 6, line 7. Arrows 40 are printed on the secondary backing 14 and are visible through the adhesive 15 and the release cover 30 to indicate the direction of the pile yarns.

Ward's method of installation in a room 70, described in column 7, includes unrolling the roll 11 provided in six foot widths and cutting a length to fit in a room 70. The floor covering 10 is then folded upon itself and the release cover 30 on the uppermost folded-over length 72 of floor covering is removed by rupturing the release cover 30 along the tear line 60 to expose the layer of pressure sensitive adhesive 15. Next, the folded-over length 72 is unfolded and positioned against the floor 71 to releasably secure the floor covering 10 (FIG. 9). The remainder 73 of the cut length is then folded over, the release cover 30 removed, and folded back to be releasably secured to the floor 71 (FIG. 11). As stated in col. 6, lines 36 – 53, when the floor covering 10 is initially installed, it can easily be peeled upwardly away from the floor 71 as only high areas 21 of the embossed pattern 20 contact the underlying floor 71. After the covering 10 is oriented in a desired position, it is pressure rolled to press the low areas into engagement with the floor 71.

The method of applying a covering to a board for exterior use in claim 1 has several patentable distinctions from Ward. First, a flexible elongated strip of covering material including a fibrous layer with an integral moldable adhesive layer applied thereto is provided, which is suitable for exterior use. Ward provides a interior use carpet with a foam backing interposed between the fibrous face 12 and the adhesive layer 15, which is only suitable for interior use. Second, the claimed method positions the strip on a board with the edges of the covering material aligned with the edges of the board. Ward merely places the carpet on a

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floor in a room, not on a board, and not with aligned edges. Third, the claimed method uses the separable positioning guide strip to tack a portion of the elongated strip of covering material in place and then adheres the entire width of the elongated strip of covering material to the board by removing the remaining release sheet. In Ward, the carpet is initially positioned by use of the high areas of the embossed secondary backing only touching the underlying floor across the entire width of the carpet. Then to adhere the carpet to the floor, the carpet is rolled to press the low areas in contact with the floor. Ward does not disclose or even suggest the installation steps of claim 1. For at least these patentable distinctions, claim 1 is allowable over Ward.

The dependent claims are also allowable for at least the reasons above and for the further features recited therein. In particular, Ward does not disclose removing a guide strip prior to removing the remainder of the release sheet as in claim 2 or intermittent removal of a guide strip with removal of the remainder of the release sheet as in claim 3. Ward also does not disclose the step of securing a trim piece to an end of a board as in claim 4.

Ward's adhesive is applied in an amount of 0.5 to 1.5 ounces per square yard so that an acceptable level of intended tackiness and cohesiveness is provided to releasably secure the carpet to a floor. This amount is well below the ranges recited in claims 6-8, which provide a permanent bond with an underlying board.

Ward does not disclose providing a positioning guide strip located in a central region of the elongated strip of material or tacking the central region to allow the side regions to move relative to the board as in claim 9. Additionally, Ward does not disclose positioning the elongated strip of covering material on a board including flexing the material to conform to the shape of the board in the longitudinal direction as in claim 10. Ward's strip also does not use a release sheet with free edges for grasping as recited in claim 14. Moreover, Ward's

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carpet is intended for application in a room and is provided in six foot widths, not in a width of about twelve inches or less as in claim 15.

Claims 1-15 are allowable.

HAAS

Haas is directed to a self adhesive floor covering including fibers 4 secured to a bonding layer that can be mixed with adhesive 2 to provide an underside 12 that bonds with a floor 20. FIG. 4 shows a carpet in which the entire underside is covered with a layer 3 of adhesive capable of forming a bond with a floor. The layer 3 has spaced projections 11 that form a relatively firm bond with the floor while the areas between the projections 11 form a relatively loose bond. This is intended to allow for expansion and contraction of the floor, so that while the projections 11 remain firmly bonded to the floor, the areas between the projections 11 can become loosened, as explained in col. 6, lines 30-51.

A protective foil 12 can be provided over the adhesive 2. If the carpet is supplied in a roll, the foil 12 can prevent the adjacent turns from sticking to one another. To install the carpet, as explained in col. 7, lines 24-44, the carpet is spread on the floor and cut to conform to the configuration of the floor. After the carpet is cut to size, the foil 20 is removed and the carpet is adhesively bonded to the floor. To simplify removal of the foil 12, the foil 12 may be divided into discrete strips 13 as seen in FIG. 6a. The strips 13 may be parallel to one another and may extend in the longitudinal direction of the carpet so that the strips 13 may be removed one by one in accordance with the progression of the carpeting operation so that the carpet is bonded to the floor in segments.

The four examples of the carpet in accordance with Haas' invention use adhesive applied in an amount of 35 gsm, 65 gsm, 45 gsm, and 60 gsm, respectively.

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In distinction, the method of claim 1 is of applying a covering to a board for exterior use, rather than an interior floor as in Haas. In accordance with claim 1, the flexible strip of covering material is provided with a separable positioning guide strip extending the length of the strip, the strip of covering material is positioned on a board with the edges aligned, the guide strip is progressively removed to tack the elongated strip of covering in place, and the remaining length of release sheet is removed to adhere the entire width of the elongated strip of covering material to the board. In Haas, the carpet is cut to fit a room and then bands of the release sheet are removed to adhere the entire width of the carpet to the floor as the installation progresses. There is no application to a board with edges and thus no positioning of the covering between edge and no use of a positioning guide strip. Accordingly, claim 1 is patentable over Haas.

The dependent claims are also allowable for at least the reasons above and for the further features recited therein. In particular, Haas does not disclose removing a guide strip prior to removing the remainder of the release sheet as in claim 2 or intermittent removal of a guide strip with removal of the remainder of the release sheet as in claim 3. Haas also does not disclose the step of securing a trim piece to an end of a board as in claim 4.

Haas provides examples of the amount of adhesive applied in practicing the invention, which are all well below the ranges recited in claims 6-8, which provide a permanent bond with an underlying board.

Haas does not disclose providing a positioning guide strip located in a central region of the elongated strip of material or tacking the central region to allow the side regions to move relative to the board as in claim 9. Additionally, Haas does not disclose positioning the elongated strip of covering material on a board including flexing the material to conform to the shape of the board in the longitudinal direction as in claim 10 or providing a free edge on

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the release sheet as in claim 14. Moreover, Haas' carpet is intended for application in a room and is cut to fit a floor; it is not provided in a width of about twelve inches or less as in claim 15.

Claims 1-15 are allowable.

TAJIMA

Tajima relates to a process for manufacturing laminated bituminous roofing membranes. The base sheet 6 of the laminated roofing membrane 26 is coated on all or part of both or one face with bitumen 8, which is then laminated with compound bitumen 20 that is denatured bitumen blended with natural or synthetic rubber and/or natural or synthetic resins. Release sheets 14 and 15 are laid over the compound bitumen 20 and can be manually peeled away at ambient temperatures.

FIG. 3B shows single or plural rows of perforations 30 or notches 31 formed in the sheet 14 to permit partial removal of the release sheet from the surface of the compound bitumen layer at the construction site to render application easier, as discussed in col. 7, lines 49-58. An example of the installation technique by removing portions of the release sheet is discussed in Example 3, beginning in col. 14, line 52. The bilateral self adhesive type roofing membranes were partially overlapped with one another, and the release sheets were removed except for on the exposed surface. Then unilateral self-adhesive type roofing membranes were laid in a partial overlap on the upper surface. Each release sheet of the membranes and remaining release sheets on the exposed surface of the bilateral type membranes overlaid previously were removed.

The method of claim 1 of this application is clearly different from the method of Tajima in that it relates to the installation of a flexible covering on boards, rather than a bituminous roofing membrane. In Tajima, the partial release sheets are used to facilitate the

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overlapping nature of the roofing method to effect sealing between the bituminous layers. There is no use of a positioning guide strip to adhere a strip of covering material to a board with adhesive. Not one of the steps of claim 1 is disclosed or suggested by Tajima. Claim 1 is allowable. The dependent claims are allowable for at least these reasons and the additional features recited therein.

POLLOCK

Pollock is relevant to claim 4, which recites the step of securing a trim piece to the end of the board with the strip of covering material adhered thereto. Pollock discloses the use of a tread protector 55, seen in FIG. 7 for example and discussed in col. 10, lines 6-40. As described in col. 5, line 63 – col. 6, line 10, Pollock uses an extruded PVC cover 7 that snaps over a plank member 5, which is an extruded channel. Claim 4 is distinct from Pollock for at least the reason that it includes the steps of claim 1, specifically providing an elongated strip of flexible covering material including a fibrous layer with an integral moldable adhesive layer and a release sheet, which are not disclosed or suggested by Pollock.


SUMMARY

The remaining prior art is either cumulative of the prior art discussed above or so clearly distinct from the claimed method it requires no further discussion. It is submitted that claims 1-15 define a patentable method as illustrated above. Prompt and favorable examination is requested.

Respectfully submitted,
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Docket Number: 082018-0306944

PATENT APPLICATION

Client Reference:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of

LAWRENCE J. O'CONNOR

Group Art Unit:

Application No.:

Examiner:

Filed: November 19, 2003

Confirmation No.:

For: A METHOD OF APPLYING A COVERING FOR BOARDS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:


Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of the first Office Action on the merits in the present application. No certification or fee is required.

This application is related to concurrently filed application entitled "Covering for Boards", which is directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to this application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

English-language Abstracts of the non-English language references are attached hereto.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Caroline D. Dennison". The signature is fluid and cursive, with the first name "Caroline" being more prominent and the last name "Dennison" following in a similar style.

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0306944

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant: Lawrence J. O'CONNOR

Appln. No.: New Appln.

Filing Date: November 19, 2003

Date: November 19, 2003

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of

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Examiner:

Group Art Unit:

U.S. PATENT DOCUMENTS

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	Des. 421,502	03/2000	Felch et al.			
	BR	US 2002/0100231 A1	08/2002	Miller et al.			
	CR	US 2002/0152712 A1	10/2002	Smith			
	DR	US 2003/0079421 A1	05/2003	Yang			
	ER	2,042,692	06/1936	D.B. Wurzburg			
	FR	3,010,589	11/1961	F.J. Stephens et al.			
	GR	3,014,829	12/1961	E. Curtin			
	HR	3,135,647	06/1964	B.O. Wheeley			
	IR	3,937,640	02/1976	Tajima et al.			
	JR	4,349,593	09/1982	Blechstein			
	KR	4,554,194	11/1985	Haas et al.			
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	MR	4,988,551	01/1991	Zegler			
	NR	4,849,267	07/1989	Ward et al.			

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		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	OR	WO 90/10112	09/1990	WIPO	O'Connor	X			
	PR	WO 98/56977	12/1998	WIPO	Mashburn	X			
	QR	DT 26 04 258	06/1977	Germany					
	RR								
	SR								
	TR								
	UR								
	VR								
	WR								
	XR								

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

	YR								
	ZR								
	AAR								
	BBR								
	CCR								
	DDR								

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Atty.
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Client Ref.

0306944

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Applicant: Lawrence J. O'Connor

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of

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Examiner:

Group Art Unit:

U.S. PATENT DOCUMENTS

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	4,907,387	03/1990	Turnbull			
	BR	5,204,155	04/1993	Bell et al.			
	CR	5,475,952	12/1995	O'Connor			
	DR	5,613,339	03/1997	Pollock			
	ER	5,794,390	08/1998	Oliveri et al.			
	FR	5,904,011	05/1999	Biro			
	GR	5,913,784	06/1999	Hite			
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	MR						
	NR						

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name		English Abstract		Translation Readily Available	
							Enclosed	No	Enclose	No
	OR									
	PR									
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	WR									
	XR									

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

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	DDR									

Examiner

Date Considered:

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